

Product datasheet for SC306601

PITX2 (NM 153426) Human Untagged Clone

Product data:

Product Type: Expression Plasmids

Product Name: PITX2 (NM_153426) Human Untagged Clone

Tag: Tag Free Symbol: PITX2

Synonyms: ARP1; ASGD4; Brx1; IDG2; IGDS; IGDS2; IHG2; IRID2; Otlx2; PTX2; RGS; RIEG; RIEG1; RS

Mammalian Cell

Selection:

None

Vector: pCMV6-XL6

E. coli Selection: Ampicillin (100 ug/mL)

Fully Sequenced ORF: >OriGene sequence for NM_153426 edited

> ATGGAGACCAACTGCCGCAAACTGGTGTCGGCGTGTGTGCAATTAGGCGTGCAGCCGGCG GCCGTTGAATGTCTCTCCCAAAGACTCCGAAATCAAAAAGGTCGAGTTCACGGACTCT CCTGAGAGCCGAAAAGAGGCAGCCAGCAGCAGTTCTTCCCGCGGCAGCATCCTGGCGCC AATGAGAAAGATAAAAGCCAGCAGGGGAAGAATGAGGACGTGGGCGCCGAGGACCCGTCT GAGGCCACTTTCCAGAGGAACCGCTACCCGGACATGTCCACACGCGAAGAAATCGCTGTG TGGACCAACCTTACGGAAGCCCGAGTCCGGGTTTGGTTCAAGAATCGTCGGGCCAAATGG AGAAAGAGGGAGCCCAACCAGCAGGCCGAGCTATGCAAGAATGGCTTCGGGCCGCAGTTC AATGGGCTCATGCAGCCCTACGACGACATGTACCCAGGCTATTCCTACAACAACTGGGCC GCCAAGGGCCTTACATCCGCCTCCCTATCCACCAAGAGCTTCCCCTTCTTCAACTCTATG AGCATGTCGTCCAGCATGGTGCCCTCAGCAGTGACAGGCGTCCCGGGCTCCAGTCTCAAC AGCCTGAATAACTTGAACAACCTGAGTAGCCCGTCGCTGAATTCCGCGGTGCCGACGCCT GCCTGTCCTTACGCGCCGCCGACTCCTCCGTATGTTTATAGGGACACGTGTAACTCGAGC CTGGCCAGCCTGAGACTGAAAGCAAAGCACCCCAGCTTCGGCTACGCCAGCGTGCAG AACCCGGCCTCCAACCTGAGTGCTTGCCAGTATGCAGTGGACCGGCCCGTGTGA

Restriction Sites: Please inquire ACCN: NM 153426

Insert Size: 950 bp

OTI Disclaimer: Our molecular clone sequence data has been matched to the reference identifier above as a

> point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative

RNA splicing form or single nucleotide polymorphism (SNP).



OriGene Technologies, Inc. 9620 Medical Center Drive, Ste 200

CN: techsupport@origene.cn

Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com

PITX2 (NM_153426) Human Untagged Clone - SC306601

OTI Annotation: This TrueClone is provided through our Custom Cloning Process that includes sub-cloning

into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube

containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method: 1. Centrifuge at 5,000xg for 5min.

2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.

3. Close the tube and incubate for 10 minutes at room temperature.

4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid

at the bottom.

5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of

shipping when stored at -20°C.

RefSeq: <u>NM 153426.1</u>, <u>NP 700475.1</u>

 RefSeq Size:
 2250 bp

 RefSeq ORF:
 954 bp

 Locus ID:
 5308

 UniProt ID:
 Q99697

Cytogenetics:

Protein Families: Transcription Factors

Protein Pathways: TGF-beta signaling pathway

4q25

Gene Summary: This gene encodes a member of the RIEG/PITX homeobox family, which is in the bicoid class

of homeodomain proteins. The encoded protein acts as a transcription factor and regulates procollagen lysyl hydroxylase gene expression. This protein plays a role in the terminal

differentiation of somatotroph and lactotroph cell phenotypes, is involved in the

development of the eye, tooth and abdominal organs, and acts as a transcriptional regulator involved in basal and hormone-regulated activity of prolactin. Mutations in this gene are associated with Axenfeld-Rieger syndrome, iridogoniodysgenesis syndrome, and sporadic

cases of Peters anomaly. A similar protein in other vertebrates is involved in the

determination of left-right asymmetry during development. Alternatively spliced transcript variants encoding distinct isoforms have been described. [provided by RefSeq, Jul 2008] Transcript Variant: This variant (2), also known as ARP1b, encodes the predominant isoform

(b).